

Home assignment

1. An Arrhenius base increases the concentration of OH^- ions. A Bronsted-Lowry acid is any species that donates a proton to another molecule. A Bronsted-Lowry base is any species that accepts a proton from another molecule. A Lewis acid is an electron pair acceptor.
2. Ammonia doesn't contain any hydroxide ions to begin with, but when it's dissolved in water it acquires hydrogen ions from the water to produce hydroxide as well as ammonium ions. However, ammonia doesn't fully convert into hydroxide and ammonium ions in a solution; which is why it is considered a weak base.
3. The oxidation state of manganese changes as the potassium permanganate oxidation state 7 decomposes to potassium manganate oxidation state +6 and manganese dioxide oxidation state 4 oxygen gas is also liberated.